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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/712,123

11/15/2000

Dan Horlin

2380-152

8809

7590

05/10/2004

Nixon & Vanderhye PC  
1100 North Glebe Road 8th Floor  
Arlington, VA 22201-4714

EXAMINER

PIZARRO, RICARDO M

ART UNIT

PAPER NUMBER

2661

9

DATE MAILED: 05/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/712,123

Applicant(s)

HORLIN ET AL.

Examiner

Ricardo M. Pizarro

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 November 2000.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 7-12 is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_\_ is/are rejected.
- 7) ☒ Claim(s) 4-6 and 14-17 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Objections*

1. Claims 5 and 16 are objected to because of the following informalities:

In claim 5 line 4 replace "a" with –said-

In claim 16 line 3 replace "a" with –said\_

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-3, 6, 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta in view of Holden.

US patent No. 5,475,383 ( Ohta et al)discloses a cross point type switch comprising a switch core comprising: a buffer matrix ( Matrix in Fig. 4, col 3 lines37-38) having one buffer memory per cross point ( said matrix includes one memory basic element 20-1 to 20-m per each crosspoint) to which cells having differing priority classes are written, as in claim 1; wherein the buffer matrix has only one buffer memory per crosspoint (memory basic elements in Fig. 4), as in claim 3.

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Ohta did not specifically disclose a high priority signaling element associated with a corresponding crosspoint, the high priority signaling element when active indicating that a high priority cell is in a queue awaiting writing to the buffer memory for its corresponding crosspoint; input/output logic for reading out any low priority cell that resides in the buffer memory for the corresponding crosspoint when the high priority signaling element is active, as in claims 1 and 13; wherein the high priority signaling element is also active when the high priority cell is in the buffer memory for the corresponding crosspoint, as in claim 2.

US patent No. 6,151,301 ( Holden et al) disclose an ATM switching architecture comparing:

a high priority signal element associated with a corresponding crosspoint ( Fig. 5, high priority signals are assigned a high priority queue, col 6 lines 64-67, col 7 lines 103 all memory cells having a corresponding crosspoint, col 5 lines 55-60) the high priority signaling element when active indicating that a high priority cell is in a queue awaiting writing to the buffer memory for its corresponding crosspoint ( said High priority queue storing signals to be written to buffer memory,, col 2 lines 65-67); input/output logic for reading out any low priority cell that resides in the buffer memory for the corresponding crosspoint ( I/O reads priority from buffer pool. Col 3 lines 5-10), as in claims 1 and 13; wherein the high priority signaling element is also active when the high priority cell is in the buffer memory for the corresponding crosspoint ( said High priority queue storing signals to be written to buffer memory,, col 2 lines 65-67), as in claim 2

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to provide the priority classification as disclosed by Holden to the Cross-point switch as disclosed by Ohta with the motivation of obtaining an architecture and switching element that optimally uses available memory from queuing and buffering data packets at high traffic cross points without slowing switching operations.

*Allowable Subject Matter*

4. Claim 7-12 and 18-24 allowed.

Claims 4-6, 14-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

Please also notice objection to claims 5 and 16 under 37 CFR 1.75

*Conclusion*

5. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314

(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (703) 305-1121. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9314.

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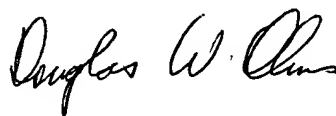
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Douglas Olms**, can be reached on (703) 305-4703.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

April 28, 2004

*Ricardo M. Pizarro*



DOUGLAS OLMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600